

**CLAIM AMENDMENTS**

1. (Currently Amended) A multimedia system comprises:

multimedia server operably coupled to receive a plurality of channels of a multimedia source, wherein the multimedia server includes:

tuning module operably coupled to receive the plurality of channels and to select a set of channels from the plurality of channels based on a set of channel select commands that is derived from select requests;

channel mixer operably coupled to mix the set of channels into a stream of channel data; and

first transceiving module operably coupled to transmit the stream of channel data on to a first communication path and to receive the select requests;

second transceiving module operably coupled to transmit the stream of channel data via a second communication path; and

client module that produces the select requests for at least one of a plurality of clients, wherein the at least one of the plurality of clients is operably coupled to

receive at least a portion of the stream of channel data, wherein the client module includes:

selection module operable to produce at least one of the select requests; and

network interface controller operably coupled to transmit the at least one of select requests to the multimedia server and to receive the stream of channel data via the first communication path.

2. (Original) The multimedia system of claim 1, wherein the plurality of clients comprises at least one of: a computer, a laptop computer, a personal digital assistant, a video telephone, a digital telephone, a cellular telephone, a monitor, a television, a high definition television, printer, and a facsimile machine.

3. (Currently Amended) The multimedia system of claim 1, wherein the multimedia server further comprises:

control module operably to the tuning module, the channel mixer, the first transceiving module and the second transceiving module, wherein the control module interprets the select requests to produce the set of channel select commands, wherein the control module facilitates formatting the stream of channel data for transmission via the first transceiving module and the second transceiving module, and wherein the control module facilitates deformatting of the select requests.

4. (Currently Amended) The multimedia system of claim 3, wherein the first communication path comprises at least one of:

wireline connection, wherein the stream of channel data and the select requests are transceived via the wireline connection utilizing a type of transceiving that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

transmit wireline connection, wherein the stream of channel data is transmitted via the transmit wireline connection utilizing a type of transmission that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

receive wireline connection, wherein the select requests are received via the receive wireline connection utilizing a type of reception that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude

modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

radio frequency path, wherein the stream of channel data and the select requests are transceived via the radio frequency path utilizing the type of transceiving;

transmit radio frequency path, wherein the stream of channel data is transmitted via the transmit radio frequency path utilizing the type of transmission;

receive radio frequency path, wherein the select requests are received via the receive radio frequency path utilizing the type of reception;

infrared path, wherein the stream of channel data and the select requests are transceived via the infrared path utilizing the type of transceiving;

transmit infrared path, wherein the stream of channel data is transmitted via the transmit infrared path utilizing the type of transmission; and

receive infrared path, wherein the select requests are received via the receive infrared path utilizing the type of reception.

5. (Original) The multimedia system of claim 3, wherein the control module further comprises:

host processor, external I/O bus, host memory, memory bridge interoperably coupled to provide server control operations, wherein the server control operations include: interpreting the select requests to produce the set of channel select commands; and

coordinating the mixing of the set of channels, formatting of the stream of channel data and transmitting the formatted channel data, such that a client of the plurality of clients receives appropriate requested data.

6. (Original) The multimedia system of claim 5, wherein the control module further comprises:

hard drive operably coupled to store at least a portion of the stream of data.

7. (Original) The multimedia system of claim 3, wherein the control module further comprises:

means for processing client access privileges for each of the plurality of clients.

8. (Currently Amended) The multimedia system of claim 1, wherein the first transceiving module further comprises:

an analog multiplexor for converting the stream of channel data into analog signals, wherein the analog signals are transmitted to the at least one of the plurality of clients.

9. (Cancelled)

10. (Original) The multimedia system of claim 1, wherein the set of channel select commands comprises at least one of:

audio channel select;  
video channel select;  
audio source;  
video source;  
volume adjust;  
picture quality settings and adjustments;  
displaying restrictions;  
purchase requests;  
picture-in-picture activation and deactivation;  
picture-in-picture channel select;  
video blanking; and  
audio muting.

11. (Currently Amended)) The multimedia system of claim 1, wherein the first transceiving module further comprises:

encoder operably coupled to encode the stream of data prior to transmitting the stream of channel data, wherein the encoder encodes the stream of data based on at least one of: multilevel encoding; non return to zero (NRZ) encoding; Manchester encoding; block encoding; and nB/mB encoding, where  $n < m$ .

12. (Currently Amended) A multimedia system comprises:

multimedia server operably coupled to receive data from a plurality of multimedia sources and to provide a stream of channel data from channels associated with the plurality of multimedia sources based on a set of channel select commands wherein the set of channel select commands are derived from select requests, wherein the multimedia server comprises:

tuning module operably coupled to receive the channels from the plurality of multimedia sources and to select a set of channels based on the set of channel select commands;

channel mixer operably coupled to mix the set of channels into the stream of channel data;

transceiving module operably coupled to transmit the stream of channel data on to a communication path and to receive the select requests; and

control module operably to the tuning module, the channel mixer, and the transceiving module, the control module including a host processor, external I/O bus, host memory, and memory bridge interoperably coupled to provide server control operations, wherein the control module interprets the select requests to produce the set of channel select commands, wherein the control module facilitates formatting the stream of channel data for transmission via the transceiving



module, and wherein the control module facilitates  
deformatting of the select requests; and

a plurality of client modules operably coupled to the multimedia server to provide the select requests, wherein at least some of the plurality of client modules are operably coupled to a corresponding one of a plurality of clients, and wherein each of the corresponding ones of the plurality of clients displays at least a portion of the stream of channel data, wherein the at least a portion of the stream of channel data is based on at least one of the set of channel select commands provided to the multimedia server by an affiliated one of the at least some of the plurality of client modules.

13. (cancelled)

14. (Currently Amended) The multimedia system of claim ~~13~~12, wherein each of the plurality of client modules comprises:

selection module operable to produce at least one of the select requests; and

transmitting module operably coupled to the communication path to transmit the at least one of the select requests to the multimedia server.

15. (Currently Amended) The multimedia system of claim ~~13~~12, wherein the communication path comprises at least one of:

wireline connection, wherein the stream of channel data and the select requests are transceived via the wireline connection utilizing a type of transceiving that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

transmit wireline connection, wherein the stream of channel data is transmitted via the transmit wireline connection utilizing a type of transmission that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

receive wireline connection, wherein the select requests are received via the receive wireline connection utilizing a type of reception that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude

modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

radio frequency path, wherein the stream of channel data and the select requests are transceived via the radio frequency path utilizing the type of transceiving;

transmit radio frequency path, wherein the stream of channel data is transmitted via the transmit radio frequency path utilizing the type of transmission;

receive radio frequency path, wherein the select requests are received via the receive radio frequency path utilizing the type of reception;

infrared path, wherein the stream of channel data and the select requests are transceived via the infrared path utilizing the type of transceiving;

transmit infrared path, wherein the stream of channel data is transmitted via the transmit infrared path utilizing the type of transmission; and

receive infrared path, wherein the select requests are received via the receive infrared path utilizing the type of reception.

16. (Currently Amended) The multimedia system of claim 1312, ~~wherein the control module further comprises:~~

~~host processor, external I/O bus, host memory, memory bridge interoperably coupled to provide server control operations,~~ wherein the server control operations include: interpreting the select requests to produce the set of channel select commands; and coordinating the mixing of the set of channels, formatting of the stream of channel data and transmitting the formatted channel data, such that a client of the plurality of clients receives appropriate requested data.

17. (Original) The multimedia system of claim 16, wherein the control module further comprises:

hard drive operably coupled to store at least a portion of the stream of data.

18. (Currently Amended) The multimedia system of claim 1312, wherein the control module further comprises:

means for processing client access privileges for each of the plurality of clients.

19. (Currently Amended) The multimedia system of claim ~~13~~12, wherein the transceiving module further comprises:

encoder operably coupled to encode the stream of data prior to transmitting the stream of channel data, wherein the encoder encodes the stream of data based on at least one of: multilevel encoding; non return to zero (NRZ) encoding; Manchester encoding; block encoding; and nB/mB encoding, where  $n < m$ .

20. (Currently Amended) A multimedia server for using a multimedia system, the multimedia server comprises:

tuning module operably coupled to receive a plurality of channels from a multimedia source and to select a set of channels from the plurality of channels based on a set of channel select commands that is derived from select requests;

channel mixer operably coupled to mix the set of channels into a stream of channel data; and

transceiving module including a router, operably coupled to transmit the stream of channel data on to a communication path and to receive the select requests from at least one client module, remote from the multimedia server and affiliated with at least one of a the plurality of clients, wherein the communication path comprises:

wireline connection, wherein the stream of channel data and the select requests are transceived via the wireline connection utilizing a type of transceiving that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

transmit wireline connection, wherein the stream of channel data is transmitted via the transmit wireline connection utilizing a type of transmission that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection; and

receive wireline connection, wherein the select requests are received via the receive wireline connection utilizing a type of reception that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection; and

control module operably to the tuning module, the channel mixer, and the transceiving module, wherein the control module interprets the select requests to produce the set of channel select commands, wherein the control module facilitates formatting the stream of channel data for transmission via the transceiving module, and wherein the control module facilitates deformatting of the select requests;

wherein the control module formats the stream of channel data based on the type of transceiving to produce formatted channel data,

wherein the router provides the formatted channel data to the at least one of the plurality of clients during transmitting intervals on the wireline connection,

wherein the client module causes the select requests to be formatted based on the type of transceiving to produce formatted select requests,

wherein the router receives the formatted select requests via the wireline connection during receiving intervals on the wireline connection, and

wherein the control module determines the transmitting intervals and the receiving intervals.

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)



24. (Currently Amended) The multimedia server of claim 2022, wherein the transceiving module further comprises, when the communication path includes the transmit wireline connection:

transmission router operably coupled to the control module and the channel mixer,

wherein the control module causes the stream of channel data to be formatted based on the type of transmission to produce formatted channel data, and

wherein the transmission router provides the formatted channel data to the at least one of the plurality of clients.

25. (Currently Amended) The multimedia server of claim 2022, wherein the transceiving module further comprises, when the communication path includes the receive wireline connection:

reception router operably coupled to the control module,

wherein the client module formats at least one of: the select requests and inbound data based on the type of reception to produce formatted reception data, and

wherein the reception router receives the formatted reception data via the wireline connection.

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Currently Amended) The multimedia server of claim 2021, wherein the control module further comprises:

host processor, external I/O bus, host memory, memory bridge interoperably coupled to provide server control operations, wherein the server control operations include: interpreting the select requests to produce the set of channel select commands; and coordinating the mixing of the set of channels, formatting of the stream of channel data and transmitting the formatted channel data, such that a client of the plurality of clients receives appropriate requested data.

33. (Original) The multimedia server of claim 32, wherein the control module further comprises:

hard drive operably coupled to store at least a portion of the stream of data.

34. (Currently Amended) The multimedia server of claim 2021, wherein the control module further comprises:

means for processing client access privileges for each of the plurality of clients.

35. (Original) The multimedia server of claim 20, wherein the transceiving module further comprises:

an analog multiplexor for converting the stream of channel data into analog signals, wherein the analog signals are transmitted to the at least one of the plurality of clients.

36. (Original) The multimedia server of claim 20 further comprises:

second transceiving module operably coupled to transmit the stream of channel data via a second communication path.

37. (Original) The multimedia server of claim 20, wherein the transceiving module further comprises:

encoder operably coupled to encode the stream of data prior to transmitting the stream of channel data, wherein the encoder encodes the stream of data based on at least one of: multilevel encoding; non return to zero (NRZ) encoding; Manchester encoding; block encoding; and nB/mB encoding, where  $n < m$ .

38. (Currently Amended) A method ~~for providing multimedia services to a local area network having at least one communication path, the method comprises comprising:~~

providing multimedia services to a local area network having at least one communication path that comprises at least one of:

radio frequency path, wherein the stream of channel data and the select requests are transceived via the radio frequency path utilizing the type of transceiving that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

transmit radio frequency path, wherein the stream of channel data is transmitted via the transmit radio frequency path utilizing the type of transmission that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

receive radio frequency path, wherein the select requests are received via the receive radio frequency path utilizing the type of reception that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

infrared path, wherein the stream of channel data and the select requests are transceived via the infrared path utilizing the type of transceiving;

transmit infrared path, wherein the stream of channel data is transmitted via the transmit infrared path utilizing the type of transmission; and

receive infrared path, wherein the select requests are received via the receive infrared path utilizing the type of reception;

receiving a plurality of channels from at least one multimedia source;

receiving select requests from at least one client module via the communication path;

generating a set of channel select commands from the select requests;

selecting a set of channels from the plurality of channels based on the set of channel select commands;

mixing the set of channels into a stream of channel data; and

transmitting the stream of channel data on to the communication path such that at least one of a plurality of clients receives at least a portion of the stream of channel data.

39. (Original) The method of claim 38 further comprises:

interpreting the select requests to produce the set of channel select commands;

formatting the stream of channel data for transmission via the transceiving module;

deformatting of the select requests as part of generating the set of channel select commands.

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44. (Currently Amended) The method of claim 3840 further comprises, when the communication path includes the radio frequency path:

formatting the stream of channel data based on the type of transceiving to produce formatted channel data;

providing the formatted channel data to the at least one of the plurality of clients during transmitting intervals on the radio frequency path;

receiving formatted select requests via the radio frequency path during receiving intervals on the radio frequency path, wherein the client module formats the select requests based on the type of transceiving to produce the formatted select requests; and

determining the transmitting intervals and the receiving intervals.

45. (Currently Amended) The method of claim 3840 further comprises, when the communication path includes the transmit radio frequency path:

formatting the stream of channel data based on the type of transmission to produce formatted channel data; and

providing the formatted channel data to the at least one of the plurality of clients via the transmit radio frequency path.

46. (Currently Amended) The method of claim 3840 further comprises, when the communication path includes the receive radio frequency path:

receiving formatted reception data via the receive radio frequency path, wherein the client module formats at least one of: the select requests and inbound data based on the type of reception to produce the formatted reception data.

47. (Currently Amended) The method of claim 3840 further comprises, when the communication path includes the infrared path:

formatting the stream of channel data based on the type of transceiving to produce formatted channel data;

providing the formatted channel data to the at least one of the plurality of clients during transmitting intervals on the infrared path;

receiving formatted select requests via the infrared path during receiving intervals on the infrared path, wherein the client module formats the select requests based on the type of transceiving to produce the formatted select requests; and

determining the transmitting intervals and the receiving intervals.



48. (Currently Amended) The method of claim 3840 further comprises, when the communication path includes the transmit infrared path:

formatting the stream of channel data based on the type of transmission to produce formatted channel data; and

providing the formatted channel data to the at least one of the plurality of clients via the transmit infrared path.

49. (Currently Amended) The method of claim 3840 further comprises, when the communication path includes the receive infrared path:

receiving formatted reception data via the receive infrared path, wherein the client module formats at least one of: the select requests and inbound data based on the type of reception to produce the formatted reception data.

50. (Original) The method of claim 38 further comprises;

interpreting the select requests to produce the set of channel select commands; and

coordinating the mixing of the set of channels, formatting of the stream of channel data and transmitting the formatted channel data, such that a client of the plurality of clients receives appropriate requested data.

51. (Original) The method of claim 38 further comprises:

storing at least a portion of the stream of data on a hard drive.

52. (Original) The method of claim 38 further comprises:

processing client access privileges for each of the plurality of clients.

53. (Original) The method of claim 38 further comprises:

converting the stream of channel data into analog signals, wherein the analog signals are transmitted to the at least one of the plurality of clients.

54. (Original) The method of claim 38 further comprises:

transmitting the stream of channel data via a second communication path.

55. (Original) The method of claim 38, wherein transmitting the stream of channel data on to the communication path further comprises:

encoding the stream of data prior to transmitting the stream of channel data, wherein the encoding of the stream of data is based on at least one of: multilevel encoding; non return to zero (NRZ) encoding; Manchester encoding; block encoding; and nB/mB encoding, where  $n < m$ .

56. (Previously Presented) An apparatus for providing multimedia services to a local area network having ~~at least one~~ a first communication path and a second communication path, the apparatus comprises:

processing module; and

memory operably coupled to the processing module, wherein the memory stores operational instructions that cause the processing module to:

receive a plurality of channels from at least one multimedia source;

receive select requests from at least one client module via the communication path;

generate a set of channel select commands from the select requests;

select a set of channels from the plurality of channels based on the set of channel select commands;

mix the set of channels into a stream of channel data;  
~~and~~

transmit the stream of channel data on to the first communication path such that at least one of a plurality of clients receives at least a portion of the stream of channel data; and

transmit the stream of channel data via the second communication path.

57. ((Currently Amended)) The apparatus of claim 56, wherein the memory further comprises operational instructions that cause the processing module to:

interpret the select requests to produce the set of channel select commands;

formatting the stream of channel data for transmission via the first transceiving module; and

deformatting of the select requests as part of generating the set of channel select commands.

58. (Currently Amended) The apparatus of claim 56, wherein the first communication path comprises at least one of:

wireline connection, wherein the stream of channel data and the select requests are transceived via the wireline connection utilizing a type of transceiving that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

transmit wireline connection, wherein the stream of channel data is transmitted via the transmit wireline connection utilizing a type of transmission that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

receive wireline connection, wherein the select requests are received via the receive wireline connection utilizing a type of reception that includes at least one of: time division multiplexing, frequency division multiplexing, pulse code modulation, amplitude shift keying, phase shift keying, quadrature phase shift keying, quadrature amplitude modulation, carrier sense multi-access (CSMA), CSMA with collision avoidance, and CSMA with collision detection;

radio frequency path, wherein the stream of channel data and the select requests are transceived via the radio frequency path utilizing the type of transceiving;

transmit radio frequency path, wherein the stream of channel data is transmitted via the transmit radio frequency path utilizing the type of transmission;

receive radio frequency path, wherein the select requests are received via the receive radio frequency path utilizing the type of reception;

infrared path, wherein the stream of channel data and the select requests are transceived via the infrared path utilizing the type of transceiving;

transmit infrared path, wherein the stream of channel data is transmitted via the transmit infrared path utilizing the type of transmission; and

receive infrared path, wherein the select requests are received via the receive infrared path utilizing the type of reception.

59. (Currently Amended) The apparatus of claim 58, wherein the memory further comprises operation instructions that cause the processing module to, when the first communication path includes the wireline connection:

format the stream of channel data based on the type of transceiving to produce formatted channel data,

provide the formatted channel data to the at least one of the plurality of clients during transmitting intervals on the wireline connection,

receive formatted select requests via the wireline connection during receiving intervals on the wireline connection, wherein the client module formats the select requests based on the type of transceiving; and

determine the transmitting intervals and the receiving intervals.

60. (Currently Amended) The apparatus of claim 58, wherein the memory further comprises operation instructions that cause the processing module to, when the first communication path includes the transmit wireline connection:

format the stream of channel data based on the type of transmission to produce formatted channel data, and

provide the formatted channel data to the at least one of the plurality of clients.

61. (Currently Amended) The apparatus of claim 58, wherein the memory further comprises operation instructions that cause the processing module to, when the first communication path includes the receive wireline connection:

receive formatted reception data via the wireline connection, wherein the client module formats at least one of: the select requests and inbound data based on the type of reception to produce formatted reception data.

62. (Currently Amended) The apparatus of claim 58, wherein the memory further comprises operation instructions that cause the processing module to, when the first communication path includes the radio frequency path:

format the stream of channel data based on the type of transceiving to produce formatted channel data;

provide the formatted channel data to the at least one of the plurality of clients during transmitting intervals on the radio frequency path;

receive formatted select requests via the radio frequency path during receiving intervals on the radio frequency path, wherein the client module formats the select requests based on the type of transceiving to produce the formatted select requests; and

determine the transmitting intervals and the receiving intervals.

63. (Currently Amended) The apparatus of claim 58, wherein the memory further comprises operation instructions that cause the processing module to, when the first communication path includes the transmit radio frequency path:

format the stream of channel data based on the type of transmission to produce formatted channel data; and

provide the formatted channel data to the at least one of the plurality of clients via the transmit radio frequency path.



64. (Currently Amended) The apparatus of claim 58, wherein the memory further comprises operation instructions that cause the processing module to, when the first communication path includes the receive radio frequency path:

receive formatted reception data via the receive radio frequency path, wherein the client module formats at least one of: the select requests and inbound data based on the type of reception to produce the formatted reception data.

65. (Currently Amended) The apparatus of claim 58, wherein the memory further comprises operation instructions that cause the processing module to, when the first communication path includes the infrared path:

format the stream of channel data based on the type of transceiving to produce formatted channel data;

provide the formatted channel data to the at least one of the plurality of clients during transmitting intervals on the infrared path;

receive formatted select requests via the infrared path during receiving intervals on the infrared path, wherein the client module formats the select requests based on the type of transceiving to produce the formatted select requests; and

determine the transmitting intervals and the receiving intervals.

66. (Currently Amended) The apparatus of claim 58, wherein the memory further comprises operation instructions that cause the processing module to, when the first communication path includes the transmit infrared path:

format the stream of channel data based on the type of transmission to produce formatted channel data; and

provide the formatted channel data to the at least one of the plurality of clients via the transmit infrared path.

67. (Currently Amended) The apparatus of claim 58, wherein the memory further comprises operation instructions that cause the processing module to, when the first communication path includes the receive infrared path:

receive formatted reception data via the receive infrared path, wherein the client module formats at least one of: the select requests and inbound data based on the type of reception to produce the formatted reception data.

68. (Original) The apparatus of claim 56, wherein the memory further comprises operation instructions that cause the processing module to:

interpret the select requests to produce the set of channel select commands; and

coordinate the mixing of the set of channels, formatting of the stream of channel data and transmitting the formatted channel data, such that a client of the plurality of clients receives appropriate requested data.

69. (Original) The apparatus of claim 56, wherein the memory further comprises operation instructions that cause the processing module to:

store at least a portion of the stream of data on a hard drive.

70. (Original) The apparatus of claim 56, wherein the memory further comprises operation instructions that cause the processing module to:

process client access privileges for each of the plurality of clients.

71. (Original) The apparatus of claim 56, wherein the memory further comprises operation instructions that cause the processing module to:

convert the stream of channel data into analog signals, wherein the analog signals are transmitted to the at least one of the plurality of clients.

72. (Cancelled)

73. (Original) The apparatus of claim 56, wherein the memory further comprises operation instructions that cause the processing module to:

encode the stream of data prior to transmitting the stream of channel data, wherein the encoding of the stream of data is based on at least one of: multilevel encoding; non return to zero (NRZ) encoding; Manchester encoding; block encoding; and nB/mB encoding, where  $n < m$ .